

EFFECT OF ORGANIC FERTILIZATION ON DEVELOPMENT OF PROTEOLYTIC
BACTERIA AND ACTIVITY OF PROTEASES IN THE SOIL FOR CULTIVATION OF
MAIZE (*ZEA MAYS* L.)

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Abstract: The objective of this work was investigation of the growth dynamics of proteolytic bacteria and the enzymatic activity in soil for the cultivation of maize (*Zea mays* L.), as well as the maize yield under application of some selected organic fertilizers. Intensity and the direction of the developed changes in the soil depended on the type of applied organic fertilizer, the size of its dose introduced into the soil and on the developmental phase of the grown plant (maize). On the basis of obtained results it was found that all tested organic substances stimulated the activity of proteases. Yields of maize as raw material for silages obtained from soil fertilized with sewage sludge were similar to those obtained after the application of pig slurry and they exceeded maize yields harvested from other fertilization objects.